

ABSTRACT

A tunable imaging sensor includes a housing with four lenses mounted on a front side. A removable or rotatable filter plate/wheel fits inside the enclosure adjacent the lenses, with a camera plate holding four CMOS or CCD imagers fitting inside the enclosure adjacent the filter plate/wheel. The filter plate includes four filters, one for each lens, while the filter wheel includes sixteen filters which are rotated into position so that four filters are always aligned with the lenses and imagers. Rotating the filter wheel provides sixteen different filter combinations for the sensor. The images from each of the imagers are processed to form a composite image.